

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/983,072	10/23/2001	Prabhakar Kallanayakanahalli Somashekaraiah	P56502	8884

7590

08/26/2004

Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

EXAMINER

THAI, CUONG T

ART UNIT

PAPER NUMBER

2173

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/983,072

**Applicant(s)**SOMASHEKARAI AH, PRABHAKAR  
KALLANAYAKANA**Examiner**

CUONG T THAI

**Art Unit**

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) None is/are allowed.
- 6) ☒ Claim(s) 1-5 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 6-13 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: ____  |

### **PART III. DETAILED ACTION**

1. Claims 1-20 are presented for examination.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of 35 U.S.C. 102(b) which forms the basis for all obviousness rejections set forth in this Office action:

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Cruyningen (USPN: 5,805,167).

As per claims 1 (system) and 14 (method), Van Cruyningen anticipated discloses a device including a display section for displaying a video signal, comprising:

an on-screen display generating section for generating a menu matrix having a plurality of a menu icons arranged in a plurality of rows and columns on the display section, the plurality of menu icons being individually selectable for enabling a user to adjust a display state of the display section is taught by Van Cruyningen as the technique of menu icons 50-61 have been arranged in plurality of rows and columns on the display screen 40 (see Fig. 2), wherein menu items 50, 51, 52 and 55 are a group of very frequently used edit commands that almost every application supports (see col. 7, lines 58-60);

a key inputting section adapted to allow a user to select any desired one of the plurality of menu icons is taught by Van Cruyningen as the technique of an operator can create specific menus for individual applications. Each application can have several different popup menus that

Art Unit: 2173

are accessible through different trigger events. It is very useful to have additional popup menus not only for more application control, but also for specialized data or symbol entry (see col. 9, lines 56-61); and

a control section adapted to control a pointer so that the pointer is initially positioned at a menu icon in the central region of the menu matrix upon the initial display of the menu matrix, the pointer indicating a menu icon selected through the key inputting section is taught by Van Cruyningen as the technique of in the preferred embodiment of the invention has a keyboard interface. The trigger event is a press of a specific key, often in combination with a modifier key. The gesture is performed by holding down or repeatedly pressing arrows keys (see col. 9, lines 33-36) and access or mnemonic keys allow quick selection of a particular item in the current menu, while shortcut or accelerator keys allow quick selection of an item in the current menu or any sub menus thereof (see col. 9, lines 39-43), and **allowing operators to customize the menus, put the menu design tools in the hands of those who best known which commands and symbols they use most frequently** (see col. 10, lines 39-42) .

These claims are therefore rejected for the reasons as set forth above.

As per claim 2, the limitation of wherein control section controls the adjustment of the display state of the display section according to an input signal from the key inputting section is taught by Van Cruyningen as the technique of **allowing operators to customize the menus, put the menu design tools in the hands of those who best known which commands and symbols they use most frequently** (see col. 10, lines 39-42) .

This claim is therefore rejected for the reasons as set forth above.

As per claims 3 (system) and 15 (method), the limitation of wherein the plurality of rows of the menu matrix includes at least three rows is taught by Van Cruyningen as the technique of menu icons 50-61 have been arranged in four row (see Fig. 2). These claims are therefore rejected for the reasons as set forth above.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentably over Van Cruyningen (USPN: 5,805,167) in view of Miller (USPN: 6,613,100).

As per claims 4 (system) and 16 (method), Van Cruyningen discloses the invention substantially as claimed above. Van Cruyningen also discloses a method determines the frequency of use for each of the menu icons selected by a user via the key inputting section as the technique of wherein the operator can design menus containing the commands he or she uses most frequently (see abstract). Van Cruyningen, however, does not disclose the limitation of disposes the menu icon having the highest frequency of use at the central region of the menu matrix where the pointer is initially positioned.

Miller discloses the limitation of the menu icon having the highest frequency of use at the central region of the menu matrix where the pointer is initially positioned as the technique of

Art Unit: 2173

presenting the GUI 200 to the user wherein the current document is displayed in the display panel 260 (see col. 4, lines 45-52 and see Fig. 2A) while a plurality of selection panels that collectively form a border around the current document of the display panel (see Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include Miller teaching of current document is displayed in the center of the display device while the relevant documents surrounded on the border of the current document into that of Van Cruyningen's invention. By doing so, the system would be enhanced by capable of allowing user mainly focus on the centralized current document icon and also allowing user capability of switching to another relevant document on the border of the display screen.

As per claim 5, Van Cruyningen discloses the invention substantially as claimed above. Van Cruyningen also discloses a method determines the frequency of use for each of the menu icons selected by a user via the key inputting section as the technique of wherein the operator can design menus containing the commands he or she uses most frequently (see abstract). Van Cruyningen, however, does not disclose the limitation of disposes the remaining menu icons around the central region of the menu matrix so that those of the menu icons having higher frequencies of use are arranged closer to the central region of the menu matrix than those of the menu icons having lower frequencies of use.

Miller discloses the limitation of the remaining menu icons around the central region of the menu matrix so that those of the menu icons having higher frequencies of use are arranged closer to the central region of the menu matrix than those of the menu icons having lower

Art Unit: 2173

frequencies of use as the technique of presenting the GUI 200 to the user wherein the current document is displayed in the display panel 260 (see col. 4, lines 45-52 and see Fig. 2A) while other selection panels are a plurality of thumbnails of other documents that are deemed **relevant to the current document by a predetermined, user defined criterion** (see Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include Miller teaching of current document which having higher frequency of use is arranged closer to the central region of the menu matrix than those of the menu icons having lower frequencies of use into that of Van Cruyningen's invention. By doing so, the system would be enhanced by capable of allowing user mainly focus on the current document which have more priority than the ones which have lower priorities.

*Allowable Subject Matter*

6. Claims 6, 7 and 17<sup>20</sup> are objected as being dependent upon a rejected based claim, but would be allowable if rewritten in independent form including all of the limitations of the based claim and any intervening claims.

7. The following is an Examiner's statement of reasons for allowance:

Examiner has carefully considered claims 6 and 7 of the presented application. Claim 17 is objected for the same reasons applied to claim 6 except for method instead of system claim. Claims 8-13 are further limits depend on objected claim 7. Claims 18-20 are further limits depend on objected claim 17. None of the cited arts of records discloses, suggest, nor teaches a



Art Unit: 2173

display device including a display section for displaying a video signal comprising a control section wherein the control section disposes the four menu icons having the frequencies of use closest in frequency to the menu icon having the highest frequency of use adjacent to said menu icon having the highest frequency of use **in an order of right, top, left and bottom sides of said menu icon having the highest frequency of use** (see claim 6) nor a display device including a display section for displaying a video signal comprising a key inputting section wherein the key inputting section comprises a plurality of directional keys, and **each menu icon is reachable from said menu icon in the central region of the menu matrix through a corresponding predetermined number of incremental steps in response to the user's manipulation of said directional keys, those menu icons farthest away, geometrically, from said menu icon in the central region of the menu matrix requiring the most amount of incremental steps to be reached** (see claim 7). The prior arts of record including patent issued to Van Cruyningen discloses a method and apparatus for using directional gestures in pop up menu as well as events trigger by specific keys and patent issued to Miller discloses the method wherein the operator has capable of determining the degree of frequently of used of documents and placing those frequently of use documents around the most priority document. None of them, however, discloses nor suggest a display device includes a control section disposes the four menu icons having the frequencies of use closest in frequency to the menu icon having the highest frequency of use adjacent to said menu icon having the highest frequency of use **in an order of right, top, left and bottom sides of said menu icon having the highest frequency of use** nor a display device including a display section for displaying a video signal comprising a key inputting section wherein the key inputting section comprises a plurality of directional keys, and **each menu icon is reachable from**

Art Unit: 2173

said menu icon in the central region of the menu matrix through a corresponding predetermined number of incremental steps in response to the user's manipulation of said directional keys, those menu icons farthest away, geometrically, from said menu icon in the central region of the menu matrix requiring the most amount of incremental steps to be reached.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach a method and system for accessing, editing, linking, and controlling a hierarchical menus structure on screen workspace as well as controlling and arranging the degree of recency and frequency of use of menus structure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG T THAI whose telephone number is (703) 308-7234. The examiner can normally be reached on 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR


Art Unit: 2173

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CUONG T THAI  
Examiner  
Art Unit 2173

\*\*\*

August 19, 2004.



RAYMOND J. BAYERL  
PRIMARY EXAMINER  
ART UNIT 2173